

## BUDGETING FROM AN ISLAMIC GREEN ECONOMY PERSPECTIVE IN LOCAL DEVELOPMENT

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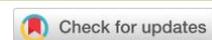
**Abstract:** Global climate change and environmental problems significantly threaten the Earth's ability to support human needs and well-being. This crisis is exacerbated by increased economic development activities that rely heavily on exploiting natural resources. Indonesia, facing similar challenges, requires the implementation of a sustainable and environmentally friendly economic model. This study examines budgeting in the context of local government budget documents and regional development reports, focusing on integrating green economic principles in the Mataraman region of East Java, Indonesia. This study uses a qualitative approach to examine local government budget and economic development reports from Madiun City and Ponorogo Regency. It involves a comprehensive analysis of both primary and secondary sources related to local development and budgeting. The findings aim to contribute to promoting and accelerating green economic development in the region, thereby influencing the allocation of resources to foster an inclusive and prosperous community.

**Keywords:** *budgeting, green economy, local development, sustainable development*

**Abstrak:** Perubahan iklim global dan masalah lingkungan secara signifikan mengancam kemampuan bumi untuk mendukung kebutuhan dan kesejahteraan manusia. Krisis ini diperparah dengan meningkatnya kegiatan pembangunan ekonomi yang sangat bergantung pada eksploitasi sumber daya alam. Indonesia, yang menghadapi tantangan serupa, perlu menerapkan model ekonomi yang berkelanjutan dan ramah lingkungan. Penelitian ini mengkaji penganggaran dalam konteks dokumen anggaran pemerintah daerah dan laporan pembangunan daerah, dengan fokus pada pengintegrasian prinsip-prinsip ekonomi hijau di wilayah Mataraman, Jawa Timur, Indonesia. Penelitian ini menggunakan pendekatan kualitatif untuk mengkaji anggaran pemerintah daerah dan laporan pembangunan ekonomi dari Kota Madiun dan Kabupaten Ponorogo. Penelitian ini melibatkan analisis komprehensif terhadap sumber-sumber primer dan sekunder yang terkait dengan pembangunan dan penganggaran daerah. Temuan penelitian ini bertujuan untuk berkontribusi dalam mempromosikan dan mempercepat pembangunan ekonomi hijau di wilayah tersebut, sehingga dapat mempengaruhi alokasi sumber daya untuk mendorong masyarakat yang inklusif dan sejahtera.

**Kata kunci:** *ekonomi hijau, pembangunan daerah, pembangunan berkelanjutan, penganggaran*

DOI: 10.21154/invest.v3i2.7542



**To cite this article:** Cahyani Y. T., Santoso, L., & Ma'mun, S. (2023). Budgeting from an Islamic green economy perspective in local development. *Invest Journal of Sharia & Economic Law*, 3(2), 236-263. <https://doi.org/10.21154/invest.v3i2.7542>.

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### INTRODUCTION

Globalization has profoundly reshaped human life, with “business as usual” development, a significant outcome, driving today's climate and environmental crises. This has led to the domino effect of food and water shortages, commodity and energy

price volatility, uncontrolled pollution, increased greenhouse gas emissions, damage to human health, income inequality, and chronic fiscal imbalances across developed and developing nations.<sup>1</sup> In Indonesia, these global challenges manifest in high poverty and hunger rates, alongside low school enrollment.<sup>2</sup>

The situation is further complicated by the threat of a global economic recession, which the COVID-19 pandemic has exacerbated.<sup>3</sup> Given its interconnected nature, addressing this systemic global crisis requires a holistic approach. Unfortunately, our current economic system, defined by specific rules and norms, often promotes overconsumption, weakens communal bonds, and fails to balance environmental and social objectives effectively.

A more inclusive and sustainable economic vision is essential to respond to these challenges. This vision has been explored through various scholarly studies. For example, Bina examines the relationship between environmental crises and the emergence of the 'green' movement, seeking to understand its implications for sustainable development in the 21st century.<sup>4</sup> Sergey et al, explore the transformation of Russia's economy, highlighting the unbalanced economic development across its regions and underscoring the need for a green economy transition.<sup>5</sup>

Complementing these insights, Carmen Elena Stoenoiu's research thoroughly analyzes sustainable development indicators linked to SDG-9. Her study assessed the progress of eight Eastern European countries from 2013 to 2019, tracking advancements in quality infrastructure, sustainable industrialization, research, innovation, and resilient infrastructure. Using three validated working hypotheses, the study categorized the countries based on their sustainable development achievements, differentiating those with significant, moderate, and minimal progress.<sup>6</sup>

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<sup>1</sup> Ramadhan Harisman, "Green growth in the G20 and Indonesia's strategy," 2012, <https://fiskal.kemenkeu.go.id/>; Oka A. Yoeti and I. Made Adhi Gunadi, "Sustainable Tourism as a Strategic Instrument in Development Planning An Analysis of Sustainable Tourism *Destination*1, no. 1 (2013): 37-44.

<sup>2</sup> Oekan S. Abdoellah, *Pembangunan Berkelanjutan di Indonesia: Di Persimpangan Jalan* (Gramedia Pustaka Utama, 2016); Tijjani Muhammad dan Besar Bin Ngah, "Mediating Role of Customer's Satisfaction on Jaiz Bank Products: A Model Development," *Journal of Islamic Marketing* 14, no. 1 (2023): 215-35, <https://doi.org/10.1108/IIMA-08-2020-0241>.

<sup>3</sup> Rumanintya Lisaria Putri et al., "Green Economy and Low Carbon Development Drive National Economic Growth and Improve Social Welfare," *Journal of Finance, Economics and Business* 1, no. 2 (May 30, 2023): 157-85, <https://doi.org/10.59827/jfeb.v1i2.67>.

<sup>4</sup> Olivia Bina, "The Green Economy and Sustainable Development: An Uneasy Balance?" *Environment and Planning C: Government and Policy* 31, no. 6 (December 1, 2013): 1023-47, <https://doi.org/10.1068/c1310j>.

<sup>5</sup> Sergey N. Bobylev, Olga V. Kudryavtseva, and Yekaterina Yu Yakovleva, "Green Economy: Regional Priorities," *R-Economy* 1, no. 2 (2015): 268-79, <https://doi.org/10.15826/recon.2015.2.010>.

<sup>6</sup> Carmen Elena Stoenoiu, "Sustainable Development-A Path to a Better Future," *Sustainability* 14, no. 15 (January 2022): 9192, <https://doi.org/10.3390/su14159192>.

Furthermore, Mosteanu and Ong explored the role of the green economy in regional development. These studies emphasize the importance of sustainable green economic development for regional prosperity and highlight the potential of green sectors and supply chains.<sup>7</sup> Ong's study, in particular, focuses on the economic potential inherent within the green sector. It underscores the necessity of strengthening and expanding the network of green vendors and supply chains. This approach is essential for realizing the full potential of green economic initiatives and ensuring their effective integration into the broader economic fabric.<sup>8</sup>

In addition, Salman et al. argue that a green economy, energy saving, and innovation can address the imbalances caused by human activities in different regions.<sup>9</sup> David Gibbs and Kirstie O'Neill also highlight a significant gap in the regional studies literature regarding the environmental agenda, indicating a need for more research on the role of regions in promoting a green economy.<sup>10</sup>

Research on Islamic green economies, such as that by Wiratama<sup>11</sup> and Vaghefi<sup>12</sup>, illuminates the potential of Islamic economics in supporting sustainability and green growth. Azizah emphasizes the significance of Islamic social capital and business ethics in promoting environmentally conscious economies.<sup>13</sup>

Building on these perspectives, this study focuses on the Indonesian context and examines how environmental problems and climate change can be addressed by implementing a green economy. This includes analyzing the allocation of funds for green development in the national budget (APBN) and local government budget (APBD). This implies that central and regional regulations must allocate a particular budget for the green economy. The current government funding for green

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<sup>7</sup> Narcisa Roxana Moșteanu, "Green Sustainable Regional Development and Digital Era," in *Green Buildings and Renewable Energy*, ed. by Ali Sayigh, Innovative Renewable Energy (Cham: Springer International Publishing, 2020), 181-97, [https://doi.org/10.1007/978-3-030-30841-4\\_13](https://doi.org/10.1007/978-3-030-30841-4_13).

<sup>8</sup> P. Ong and R. V. Patraporn, "The Economic Development Potential of the Green Sector," 2006, <https://www.semanticscholar.org/paper/>

<sup>9</sup> K. A. Salman, M. M. Suleymanov, and Sh. M. Isaeva, "Economic Policy and Sustainable Development of Regions," ed. by A. Salamova, *SHS Web of Conferences* 172 (2023): 02015, <https://doi.org/10.1051/shsconf/202317202015>.

<sup>10</sup> David Gibbs and Kirstie O'Neill, "Future green economies and regional development: a research agenda," *Regional Studies* 51, no. 1 (January 2, 2017): 161-73, <https://doi.org/10.1080/00343404.2016.1255719>.

<sup>11</sup> Budhi Fatanza Wiratama and Zasya Safitri, "Is Islamic Economy that Green?" *Al-Muzara'ah* 11, no. 1 (June 26, 2023): 103-18, <https://doi.org/10.29244/jam.11.1.103-118>.

<sup>12</sup> Negin Vaghefi, Chamhuri Siwar, and Sarah Aziz Abdul Ghani Aziz, "Green Economy: Issues, Approaches and Challenges in Muslim Countries," *Theoretical Economics Letters* 05, no. 01 (2015): 28-35, <https://doi.org/10.4236/tel.2015.51006>.

<sup>13</sup> Mabarroh Azizah and Hariyanto Hariyanto, "Implementation of Islamic Business Ethics on the Concept of Green Economics," *Supremasi Hukum: Journal of Legal Studies* 10, no. 2 (December 31, 2021): 237, <https://doi.org/10.14421/sh.v10i2.2392>.

development is no less than 13% of the budget requirement.<sup>14</sup> In addition, Finance Minister Sri Mulyani has instructed regional heads to direct the preparation of the APBD to align with the direction of fiscal policy and national priority programs, whose central point is environmentally friendly development or the green economy.<sup>15</sup>

This study is unique for its focus on regional budgets, specifically those outlined in the local government budget and Local Development Planning Agency documents, through the lens of Islamic development economics. It aims to ascertain the extent to which green economic principles are integrated into regional budgeting practices. To gain a preliminary understanding of regional responses to the green economy, this study will focus on the Mataraman region in East Java. It will analyze the APBD development reports from the Madiun city government and Ponorogo Regency to provide a nuanced understanding of how these regions are navigating the challenges and opportunities presented by green economic development.

This study employed a qualitative research approach. The choice of a qualitative methodology is driven by the aim to deeply explore and understand phenomena within their natural social contexts. This approach facilitates in-depth interactions between researchers and the study's subjects and objects.<sup>16</sup> Data collection focused on primary and secondary sources pertinent to the local government budget (APBD) and development reports of the local governments in Madiun City and Ponorogo Regency.

The data collection techniques employed in this study included document analysis, observations, and interviews. Document analysis involved gathering written materials relevant to the research topic. Observations and interviews were conducted in the local government settings of the two selected regions. These methods aimed to gather information, responses, and explanations regarding regional budgeting from a green economy perspective. The key parties and stakeholders involved in this process included representatives from the Regional Development Planning Agency (Bappeda), members of the legislative budget committee in the Regional People's Representative Council (DPRD), environmental activists, and various social and religious institutions.

Regarding informant selection, this study utilized a purposive sampling technique.<sup>17</sup> This approach was chosen to ensure the inclusion of individuals and

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<sup>14</sup> Verda Nano Setiawan, "Bappenas: Rp306 T Needed for Green and Low Carbon Economy," August 2021, <https://katadata.co.id/yuliawati/ekonomi-hijau/61233c6d37450/bappenas-kebutuhan-dana-untuk-ekonomi-hijau-dan-rendah-karbon-rp306-t>.

<sup>15</sup> Ichsan Emerald Alamsyah, "Sri Mulyani Asks APBD to Align with National Priority Programs," *Republika Online*, 18 June 2022, <https://republika.co.id/share/rdnhcg349>.

<sup>16</sup> Sugiyono, *Understanding Qualitative Research Methods* (Bandung: Alfabeta, 2014).

<sup>17</sup> Mathew B. Miles and A. Michael Huberman, *Qualitative Data Analysis* (Jakarta: UI Press, 1992).

groups most relevant to the study's objectives, thereby facilitating a comprehensive understanding of the green economy's integration into regional budgeting practices.

## DISCUSSION

### 1.1 Exploring the Islamic Green Economy in Development

The concept of a green economy, a relatively new formulation, integrates environmental sustainability with economic activity in the development processes. This approach does not compromise environmental integrity while fostering economic growth.<sup>18</sup> The ideal realization of a green economy seeks a balance across various indicators, such as enhancing and preserving environmental quality, expanding access to economic and political activities, improving public services and infrastructure across provinces, and fostering leading sectors to address economic disparities between regions.<sup>19</sup>

Implicitly, the ethos of the green economy resonates with Indonesia's constitutional principles of sustainable development as outlined in Article 33, paragraph (4) of the 1945 Constitution. This article advocates for an economy organized on the principles of efficiency, justice, sustainability, environmental soundness, independence, and balanced development progress, emphasizing national economic unity.

The transition towards a green economy is envisaged to advance social equality and human potential development.<sup>20</sup> As noted by Sri Adiningsih, a green economy should aim to enhance societal welfare and equality while significantly reducing environmental risks. It can be perceived as an economic model that minimizes pollution, conserves natural resources, and promotes social justice.<sup>21</sup> Figure 1 presents a visual representation of this concept.

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<sup>18</sup> Abdoellah, *Sustainable Development in Indonesia*.

<sup>19</sup> Jaka Aminata, Dzulfikar Ilham Kusuma Nusantara, and Indah Susilowati, "The Analysis of Inclusive Green Growth In Indonesia," *Journal of Economics & Development Studies* 23, no. 1 (April 27

<sup>20</sup> Bobilev, Kudryavtseva, and Yakovleva, "Green Economy."

<sup>21</sup> Paul Krugman, "Building a green economy," *New York Times* 5 (2010); Satria Ardhi N, "Green Economy is the 'Right Way' - Universitas Gadjah Mada," accessed June 20, 2022, <https://ugm.ac.id/id/berita/22610-green-economy-adalah-jalan-yang-benar/>.



Figure 1. Green economy concept

As shown in Figure 1, sustainable development is achievable when its economic dimensions, in particular growth, are consistent with long-term interests, including environmental sustainability, sociocultural considerations, and national security.<sup>22</sup> The pillars of sustainable development—environment, economic growth, and social equity—are inextricably linked in a complex interplay.<sup>23</sup> This concept also entails the internalization of the environmental impacts of all social and economic activities, which means that such activities must avoid, mitigate, or account for their environmental impacts to support life in a sustainable manner.<sup>24</sup>

According to Santy et al.<sup>25</sup> a comparative study reveals a distinct gap in green economy discourse between Indonesia and other countries. Globally, discussions often focus on developmental aspects, whereas in Indonesia, the emphasis is more on energy-related issues. For instance, in Central Kalimantan, green economy initiatives concentrate on reducing greenhouse gas emissions, improving air quality, developing eco-friendly infrastructure, enhancing natural resource availability, increasing community welfare, and boosting economic competitiveness.<sup>26</sup>

In Kediri City, the implementation of a green economy to achieve sustainable development faces challenges such as an increase in the number of factories, leading to higher waste volumes and subsequent environmental issues. Addressing these requires effective waste management through programs such as 3R (reduce, reuse,

<sup>22</sup> Abdoellah, *Sustainable Development in Indonesia*.

<sup>23</sup> Budi Winarno, *Development ethics* (Yogyakarta: Ceps Publishing, 2013).

<sup>24</sup> Zaili Rusli, Dadang Mashur, and Adianto, *Sustainable Development in the Frame of Regional Autonomy* (Pekanbaru: Taman Karya, 2020).

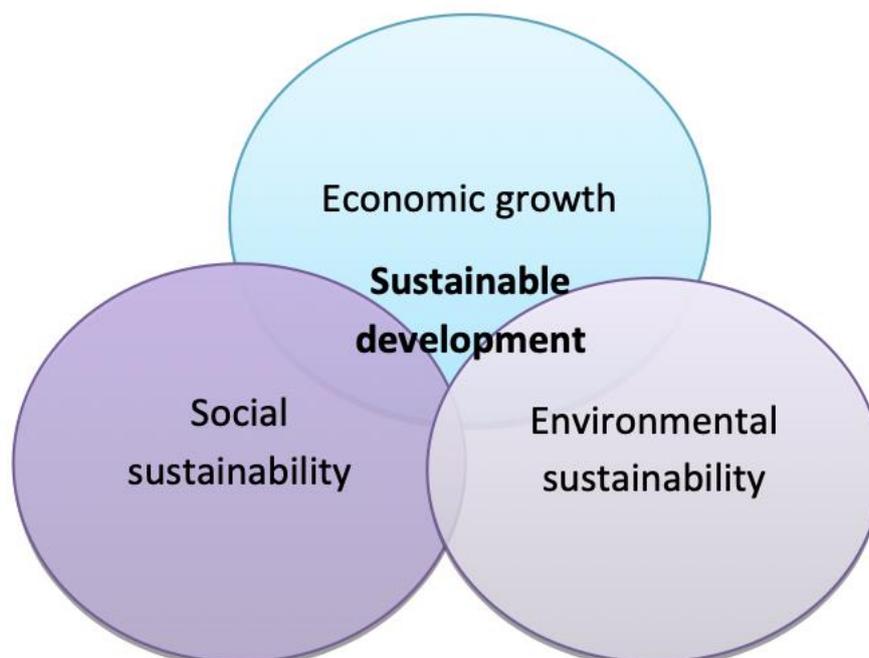
<sup>25</sup> Yuyu Jahratu Noor Santy and Mochamad Doddy Syahirul Alam, "Implementation of Green Economic Development in the Last Decade: A Systematic Review," *Proceedings of National Seminar 1* (September 29, 2022): 297–309, <https://doi.org/10.54683/puppr.v1i0.31>.

<sup>26</sup> Wita Susila and Alexandra Hukom, "Potential Implementation of Green Economy in Central Kalimantan," *Trending: Journal of Management and Economics* 1, no. 2 (April 11, 2023): 239–48, <https://doi.org/10.30640/trending.v1i2.908>.

and recycle).<sup>27</sup> Bojonegoro's approach to green economy-based regional development, aiming to fulfill the vision of Golden Indonesia 2045, reflects Indonesia's broader governmental policies geared towards enhancing technological innovation in renewable energy.

Ideal sustainable development, particularly in the context of inclusive regional growth, targets basic service provision and enhancement of healthy urban ecosystems in urban areas, thereby contributing to human welfare. The aim of rural settings is to establish sustainable agrarian ecosystems.

Achieving sustainable development at the regional level requires a balanced coordination of three main pillars: social equity, economic growth, and environmental protection. The interdependence of these pillars forms the foundation of a sustainable ecosystem, as illustrated in Figure 2.



**Figure 2.** Concept of Sustainable Development

As directly shown in Figure 2, the three pillars of sustainable development function in unity, each contributing to the others, and balance is a key indicator of success. This interconnectedness implies that the effective implementation of these pillars in various dimensions of development ensures their continuous fulfillment, thereby weaving together the fabric of a sustainable ecosystem.

In the Islamic context, development is fundamentally oriented towards human welfare, focusing on the protection of the five aspects of maqasid sharia: religion, life,

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<sup>27</sup> Dewi Wungkus Antasari, "Implementation of Green Economy towards Sustainable Development 5, no. 2 (February 7, 2020): 80-88, <https://doi.org/10.35906/jep01.v5i2.402>.

intellect, offspring, and property. Therefore, in the pursuit of an Islamic green economy, local governments, as the vanguard of national development, play a crucial role through responsive budgeting. However, not all regions in Indonesia have fully embraced the concept of a green economy. The cornerstone for promoting local governments committed to a green economy is green leadership. The key elements of the green economy that can be adapted regionally include low-carbon initiatives, green growth, green technology, green energy, green industry, green products, green living, and green management. In addition, a study by Jaka Aminata et al. points out that Indonesia's green economy growth has been relatively sluggish over the past three years, underscoring the urgency of immediate improvement.<sup>28</sup>

## **1.2 Budgeting for sustainable regional development: An overview of Ponorogo and Madiun City**

Ponorogo district consists of 21 sub-districts, including Ngrayun, Slahung, Bungkal, Sambit, Sawo, Sooko, Puduk, Pulung, Mlarak, Siman, Jetis, Balong, Kauman, Jambon, Badegan, Sampung, Sukorejo, Ponorogo, Babadan, Jenangan and Ngebel. The area of Ponorogo Regency is 1,371.78 km<sup>2</sup>. Ponorogo Regency is located between 7° 49' and 8° 20' south latitude and 111° 7' and 111° 52' east longitude. Its administrative boundaries are as follows: the Magetan, Madiun, and Nganjuk Regencies to the north; the Tulungagung and Trenggalek Regencies to the east; the Pacitan Regency to the south; and the Pacitan and Wonogiri Regencies (Central Java Province) to the west.<sup>29</sup>

Based on statistical data, the Ngrayun subdistrict was the largest, with an area of 184.76 km<sup>2</sup>. Slahung had the most villages (22) and the Pulung subdistrict had the most hamlets (67). The Ponorogo subdistrict was the smallest, covering 22.31 km<sup>2</sup>, and the Sooko and Puduk sub-districts had the fewest villages (six each). The Puduk sub-district had the smallest population.

The regional development potential of Ponorogo Regency focuses on agropolitan, agroforestry, and tourism areas. The designation of areas as agropolitan, agrotourism, and agroforestry is based on various factors, including the availability of infrastructure, high productivity and development potential, economic value, and rapid growth. Geographically, Ponorogo Regency is predominantly agrarian, with rice fields accounting for 19.9% of the total area, excluding fisheries, livestock, and plantations.

According to the BPS projections for 2020, the total population of Ponorogo Regency is 875,950, with 437,798 males and 438,152 females, resulting in a population

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<sup>28</sup> Aminata, Nusantara, and Susilowati, "The Analysis of Inclusive Green Growth in Indonesia."

<sup>29</sup> Ponorogo, *Ponorogo in Figures*, Central Bureau of Statistics, 2023.

density of 638 people/km<sup>2</sup>. The sex ratio was 99.92, indicating an almost equal distribution of males and females.

The economy of Ponorogo Regency, based on the Gross Regional Domestic Product (GRDP) in 2022, reached IDR 23.03 trillion at current prices and IDR 15.09 trillion at constant 2010 prices. The region will experience economic growth of 3.24% in 2022, with the highest growth in transport and storage (18.30%), followed by other services (13.03%) and manufacturing (11.05%). The consumption component of non-profit institutions serving households will grow by 7.24%.<sup>30</sup>

The Ponorogo district government plays an active role in achieving sustainable development goals (SDGs). Strategic environmental assessment (SEA) is integrated with the local government's medium-term (5-year) development plan (RPJMD) to ensure that sustainable development principles are embedded in planning documents. The local government budget is implemented to create policies that are orderly, lawful, efficient, economical, effective, transparent, responsible, equitable, appropriate, and beneficial, aligning the financial management of the Ponorogo district government with the SDG targets.

The local government budget for 2022–2023 in Ponorogo Regency is planned at IDR 2,561,276,028,803.00, which consists of a) operating budget, b) capital budget, c) contingency budget, and d) transfer budget.<sup>31</sup>

The spatial planning vision for the Ponorogo Regency, as outlined in the Spatial Planning and Regional Planning document, is to establish the region as an agropolitan and agribusiness center with a superior culture in East Java. These missions include the development of competitive agriculture, regional infrastructure to support agropolitan development and cultural centers, and an agribusiness center that promotes natural sustainability.<sup>32</sup>

To achieve the spatial planning objectives, the green open space (RTH) in Ponorogo Regency is expected to be at least 27,435.60 ha (20% of 137,178 ha) and targeted to reach 41,153.40 ha (30% of 137,178 ha) by 2032. According to Law No. 26/2007 of the Republic of Indonesia, a city should have at least 30% green open space. However, research by the Brawijaya University Malang shows a decrease in public green space (RTH) from 71.64 ha in 2012 to 50.50 ha in 2016. This decline is attributed to development, which reduces open space functions and leads to suboptimal RTH management. The current RTH in the Ponorogo district is concentrated in seven

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<sup>30</sup> <https://ponorogokab.bps.go.id/pressrelease/2023/03/03/61/pertumbuhan-ekonomi-kabupaten-ponorogo-tahun-2022.html>

<sup>31</sup> Perda APBD Ponorogo Regency Year 2022

<sup>32</sup> Article 3 of the Regional Regulation of Ponorogo Regency Number 1 of 2012 concerning the Regional Spatial Plan of Ponorogo Regency Year 2012-2032

points, which is significantly lower than the target of 20% set by the Ministry of Environment.<sup>33</sup>

In the last five years, Ponorogo Regency has experienced rapid development in various aspects. This development has resulted in a reduction in open space functions and their replacement with other functions that are not in accordance with their designations. Based on a study of the distribution of green open spaces in the Ponorogo Regency city center using SPOT-7 high-resolution satellite imagery, the area of green open space in 2018 in the Ponorogo Regency city center was 997.85 ha, or 20.95% of the area of the Ponorogo Regency city center, consisting of public green open spaces of 5.37% and private green open spaces of 15.58%. The distribution of RTH in the Ponorogo Regency city center tended to be clustered for parks and urban forests, elongated for road greenways, and spread for cemeteries.<sup>34</sup>

Currently, the area of public green space in the Ponorogo district is low, accounting for only approximately 10% of the 20% target set by the Ministry of Environment. The available RTH is concentrated at only seven points around the city: Kelono Sewandono Park, Aloon-aloon Park, Pendopo Park, Selo Aji Park, Wonopringgo Park, Sukowati Statue Park, and Jeruksing Park.

The management of RTH in Ponorogo is not optimal because the local government prioritizes *face-off* HOS Cokroaminoto and other main roads. Thus, the existing RTH is neglected. This shows that the results of the management of RTH carried out by the Ponorogo Regency government have not been thorough or comprehensive. The implication of this non-optimal RTH management is that the facilities that have initially been built will experience a decrease in quality and the people who enjoy these facilities will not receive good quality.<sup>35</sup>

Another problem related to alignment with the vision of sustainable development is land conversion that is not in accordance with its designation. For example, in Regional Regulation No. 1/2012 on Spatial Planning, land is designated for agriculture; in practice, it is used for housing. Consequently, housing is not licensed because the regulations violate the rules and are not allowed. Another problem is that waste management is not explicitly regulated. This problem has resulted in the current *overload of waste* in the Mrican landfill in Jenangan. Therefore,

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<sup>33</sup> Anggita Elvian Andryani and Sri Murtini, "Analysis of Green Open Space Availability Against Oxygen Needs in Ponorogo District, Ponorogo Regency," *Swara Bhumi* 3, no. 3 (2020), <https://ejournal.unesa.ac.id>.

<sup>34</sup> Kartika Purnaning Ratri, "Mapping Green Open Space (RTH) in Ponorogo Regency City Center Using High Resolution Satellite Imagery," accessed October 10, 2023, <http://repository.ipb.ac.id/handle/123456789/95432>.

<sup>35</sup> Yhoga Hardy Wiratama, Wawan Sobari, and Ali Mashuri, "Implementation of Environmental Governance in Green Open Space (RTH) Management in Ponorogo Regency," *Brawijaya Journal of Social Science* 2, no. 02 (2023), <https://doi.org/10.21776/ub.bjss.2023.002.02.3>.

in the future, it is necessary to develop a green economy vision in the RTRW of Ponorogo development that is more comprehensive by developing a *reduce, reuse, and recycle* waste processing site (TPS-3R) and the construction of an integrated waste management site (TPST), while adding a sustainable tourism sector.

Meanwhile, Madiun City is astronomically located at the coordinates of 7°-8° South latitude and between 111°-112° East longitude. The city has a strategic position as the center of regional activities in western East Java. This position makes Madiun City the center of government services, trade, services, industry, education, and health. Madiun City is a transit city that is quite strategic because it has a flat land topography, so that it is an easy choice of route for bus and train transportation and supports hinterland areas that have well-known cultural and tourism potential.

The Madiun City area is almost completely bordered/surrounded by Madiun Regency and a small part by Magetan Regency with the following boundaries: the north is bordered by Madiun District of Madiun Regency, the south is bordered by Geger District of Madiun Regency, the east is bordered by Wungu District of Madiun Regency, and the west is bordered by Jiwan District of Madiun Regency and Takeran District of Magetan Regency.

Based on BPS Madiun City in 2020, Madiun City has an area of 33.23 km<sup>2</sup>, which is divided into three subdistricts: Manguharjo, Taman, and Kartoharjo. The subdistrict with the largest area in Madiun City is Kecamatan Taman, with an area of 12.46 km<sup>2</sup> (37.50%), followed by Kecamatan Kartoharjo with an area of 10.73 km<sup>2</sup> (32.29%), and Kecamatan Manguharjo with an area of 10.04 km<sup>2</sup> (30.21%).<sup>36</sup>

Topographically, Madiun City is characterized by gently sloping lowlands stretching from north to south. The general altitude of Madiun City is approximately 63 m above sea level (a. s.l.). In the southern part of the region, the altitude reaches 67 m a. s.l. and then decreases to 63 m a. s.l., whereas in the northern part of the city, the average altitude reaches 64 m a. s.l.. The difference in altitude between one area and another is minimal, with an average land slope of 0-2%, indicating a relatively flat terrain. This condition presents significant potential for the physical development of Madiun City in the future.

Madiun city is located in the Madiun River Valley or Kali Madiun, which is the largest tributary of the Bengawan Solo River. When viewed from the surrounding area, there is a series of mountains: to the east is Mount Wilis (2,169 m), to the south are the Southern Chalk Mountains, which have an altitude of between 500 m and 1,000 m above sea level. To the west of Madiun City is Mount Lawu (3,285 m), and to the north are the Kendeng Mountains, with an altitude of between 100 m and 500 m above sea level.

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<sup>36</sup> Madiun, *Madiun in Figures 2022*, Central Bureau of Statistics, 2023.

Geologically, the structure and characteristics of the land and its potential content in Madiun City mostly consist of aluvium, and the soil type is alluvial. These soil conditions have high levels of minerals and organisms. This is because the soil type is a mixture of clay with fine sand that is gray-black in color and has a fairly good water retention capacity and can absorb water. The soil type in Madiun City is alluvial, which has high levels of minerals and organisms.

Madiun City is the center of the Madiun development area and its surroundings, which have functions including government services, trade, services, industry, education, and health for hinterland areas. As a regional activity center (PKW) in western East Java Province, Madiun City functions as a service provider within the province.

Based on data from the Central Bureau of Statistics (BPS) Madiun City, the gross regional domestic product (GRDP) at current prices in 2022 in Madiun City reached IDR 15.82 trillion. Meanwhile, the GRDP at constant prices reached IDR 11.11 trillion. This significant growth in GRDP was contributed by various business fields. There are five classes of business fields that made a significant contribution. The largest was the wholesale and retail trade sector: car and motorcycle repair at 26.64 percent. Subsequently, information and communication at 15.39 percent, processing industry at 13.27 percent, financial and insurance services at 10.01 percent, and educational services at 7.18 percent.<sup>37</sup> Based on this data, the economic growth rate in Madiun City, in 2022, reached 5.52 percent. Up compared to 2021 which was only at 4.79 percent.

In a futuristic vision of regional development, regions must focus on environmental aspects and sustainable development. This is stated in Law Number 32 of 2009 concerning Environmental Protection and Management, which stipulates that "The Government and Regional Governments are required to conduct a Strategic Environmental Assessment (SEA) in the preparation of planning and evaluation of regional development plans, especially local go government medium term (5 year) development plans. Thus, the Madiun City 2019-2024 SEA is a guideline for preparing the local go government medium term (5 year) development plan.<sup>38</sup>

Therefore, to support the growth of sustainable regional competitiveness, spatial planning is important in future development planning while considering the geographical conditions and potential for economic development in Madiun City as an urban area. Development and distribution of infrastructure and increasing economic capacity in several priority areas are necessary for regional development.

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<sup>37</sup> BPS Madiun City

<sup>38</sup> RPJMD Madiun City

If the level of basic infrastructure services in all areas remains low, it will impact the limited ability of the local population to develop their potential resources. The implementation of development in Madiun City in the future is expected to develop to improve the lives and welfare of the community in accordance with their potential.

The local government budgeting of Madiun City in 2022 is planned to be Rp. 1,158,489,327,133.00 (one trillion one hundred fifty-eight billion four hundred eighty-nine million three hundred twenty-seven thousand one hundred thirty-three rupiah), consisting of a) operating budget, b) capital budget, c) unexpected budget, and d) transfer budget.<sup>39</sup>

In the 2010–2030 Madiun City Spatial Planning and Regional Planning (RTRW) document, several areas in Madiun City have been designated for development in the agriculture, fisheries, livestock, plantation, industry, tourism, settlement, and other activities sectors. Although Madiun City is an urban area where the main focus of development does not rely on the agricultural sector. However, to support national food sovereignty efforts, Madiun City is still trying to maintain the existence of the agricultural, plantation, fishery, and livestock sectors. In addition, regional development in Madiun City is expected to focus on the development of high-value commodities. Superior commodities will help increase regional income and community welfare.

The quality of the environment is something that needs to be a concern for every region in Indonesia. The quality of the environment is a concern for every region in Indonesia, as it supports sustainable development, which considers environmental aspects to improve community welfare. To measure environmental quality, the environmental quality index (IKLH) indicator is used, which consists of the air quality index, water quality index, and land cover index.

The environmental quality index (IKLH) is calculated based on the values of the water quality index (WQI), air quality index (AQI), and land cover quality index (LQI). The IKLH value can be used to assess organizational performance to improve environmental functions with the environmental quality index indicator.

Based on the measurements, the IKLH in Madiun City from 2016 to 2020 continued to increase. The IKLH value of Madiun City continued to show improvement, with its value increasing every year. In 2016, the IKLH value was 60.15, and in 2019, it increased to 63.87.<sup>40</sup> The 2020 data of 60.15 is due to the issuance of the Ministry of Environment and Forestry letter S-318/PPKL/SET/REN.0/12/2020 concerning changes in the calculation methodology, which explains changes in the old and new methodologies.

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<sup>39</sup> Article 7 Perda No. 3 of 2021 concerning the Madiun City APBD

<sup>40</sup> Madiun City Environment Agency 2021

However, greenhouse gas emissions are a problem in Madiun City. The results of the study show that the value of greenhouse gas emissions in the Winongo landfill in Madiun City from landfilling and composting activities since 2015 was 5905.59658 metric tons of CO<sub>2</sub> equivalent (CO<sub>2</sub> eq) per year and is projected to be 7461.38442 metric tons of CO<sub>2</sub> eq per year in 2025. This demonstrates that greenhouse gas emissions at the Winongo landfill in Madiun City have increased significantly every year.<sup>41</sup>

Based on the descriptions of each region above, although their budget planning has launched a vision of sustainable development, both in the APBD and the RPJMD, the implementation and realization of development in Ponorogo District and Madiun City have not been aligned with the parent documents and regulations; therefore, the green budgeting indicators of efficiency, effectiveness, and significance have not been fulfilled.

This fact also confirms that although the importance of transitioning to a green economy has become a global commitment, including in development policies in Indonesia. However, the process of realizing the green economy in multi-sectoral regional development still faces many obstacles and requires a long period.<sup>42</sup>

This requires the active participation of various stakeholders in the region and an integral approach to realizing a green economy in the region.<sup>43</sup> The main indicators that must form the foundation of sustainable development in the region are economic, social, and environmental factors. The calculation of these integral indicators must also be associated with identifying various factual problems that are methodological, methodical, and informational in each region.

### 1.3 Problems Of Islamic Green Economic Development In The Region

Good governance is the realization of solid and responsible development management in accordance with the principles of democratization, efficiency, and openness. Good governance in realizing development is not only a task of the government but also requires the involvement of various elements of the nation, including the community and the private sector.

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<sup>41</sup> Alifitya Vicky Kiswadayani, Liliya Dewi Susanawati, and Ruslan Wirosodarmo, "Waste Composition and Potential Greenhouse Gas Emissions in Domestic Waste Management: Case Study of Winongo Landfill in Madiun City," *Journal of Natural Resources and Environment* 2, no. 3 (October 28, 2016): 9-17.

<sup>42</sup> Anastasia Y. Nikitaeva, Olga A. Chernova, and Lesego Molapisi, "Smart Territories as a Driver for the Transition to Sustainable Regional Development and Green Economy," *R-Economy* 8, no. 2 (July 13, 2022): 120-34, <https://doi.org/10.15826/recon.2022.8.2.010>.

<sup>43</sup> R. Adarina, Yu Gazukina, and K. Yankovskaya, "Indicators of the 'Green Economy' as a Tool for Monitoring the Regional Economy," *IOP Conference Series: Earth and Environmental Science* 395, no. 1 (November 2019): 012107, <https://doi.org/10.1088/1755-1315/395/1/012107>.

Good governance also implies the implementation of economic development policies for the benefit of the people and for the prosperity of certain individuals or groups. In the context of Green APBD, it can be interpreted as a local government budget in which the revenue, expenditure, and finance are in line with the spirit of environmental conservation.

Regarding the technical aspects of the Green APBD, it begins with the General Directions and Policies of the APBD prepared by the Regional Government together with the DPRD. The General Directions and Policies of the APBD should contain environmental considerations and policies for its preservation. Environmental aspects, such as the realization of protected forest areas, decreasing levels of pollution, and environmental destruction, should be included in the goals of the regional development agenda.

Sustainable social progress highlights that every human advancement has its own set of changes due to the interdependence of social, economic, and environmental sustainability. Environmental sustainability promotes economic growth and progress while affirming the natural resource base and ecosystem services facilitated by ecosystems by reducing environmental degradation.<sup>44</sup>

To overcome this climate crisis and environmental crisis, the global community agreed on the concept of a green economy as part of sustainable development. The green paradigm can be understood as an ideological framework that places human relations with nature as the basis (anthro-cosmocentric), with a commitment to increase development efficiency without sacrificing environmental sustainability. This trend was conveyed by Gibbs and O'Neill, who stated that over the past 30 years, there has been massive attention from various circles to the adverse effects of economic and industrial development through the green economy.<sup>45</sup>

Indonesia's attention to the green economy was marked by the launch of the Green Economy Index (GEI) on August 9, 2022. The event coincided with the third Development Working Group forum organized by the Ministry of National Development Planning/Bappenas and the G-20 forum (LCDI, 2022). In the future, the GEI will serve as a benchmark for Indonesia's achievements in the transition to a green economy to achieve a balance between economic prosperity and social equity and mitigate the risk of environmental damage.<sup>46</sup>

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<sup>44</sup> Jaime Alberto Romero-Infante et al, "Green Economy Metrics as a Promoter of Sustainable Development in Universities. Case Study: El Bosque University," *Journal of Sustainability Perspectives 2*, no. 0 (August 1, 2022): 439–48, <https://doi.org/10.14710/jsp.2022.15546>.

<sup>45</sup> Gibbs and O'Neill, "Future green economies and regional development."

<sup>46</sup> "Indonesia Launches Green Economy Index to Measure Sustainable Development Transformation," accessed October 10, 2023. <http://greengrowth.bappenas.go.id/>. See also <https://www.ekon.go.id>.

Indonesia's commitment was reaffirmed through President Joko Widodo's speech at the MPR Annual Session on August 16, 2022. The President conveyed the importance of optimizing clean energy sources and the green economy to realize an inclusive, just, and sustainable Indonesia. This commitment also synergizes with the main agenda of the 2023 State Budget, which has a vision of inclusive and sustainable economic transformation.<sup>47</sup>

The vision of a green economy is ideally grounded in a vision of an economy that delivers prosperity for all within the ecological limits of the entire planet. This vision is based on five key principles, each of which draws on important precedents in international policy and guides common economic reforms in various contexts.

First, the principle of prosperity. A green economy enables all people to create and enjoy prosperity. The green economy is human-centered. The goal is to create genuine shared prosperity. The green economy focuses on the growth of wealth that will support well-being. This wealth is not just financial but includes a range of human, social, physical, and natural capital. It prioritizes investments in and access to sustainable natural systems, infrastructure, knowledge, and education needed for all people to prosper. It offers opportunities for environmentally sustainable and decent livelihoods, enterprises, and jobs. It is built on collective action for public goods but grounded in individual choice.

Second, the principle of Equity. A green economy promotes equality within and between generations. It is inclusive and non-discriminatory. It shares decision-making, benefits, and costs equitably; avoids elite control; and supports women's empowerment, in particular. A green economy promotes an equitable distribution of opportunities and outcomes, reduces inequalities between people, and provides sufficient space for wildlife and wilderness.

It takes a long-term perspective on the economy, creating wealth and resilience that serve the interests of citizens in the future, while also acting immediately to address poverty and multidimensional injustice today. It is based on solidarity and social justice, strengthening trust and social bonds, and supporting human rights, workers' rights, indigenous peoples and minorities, and the right to sustainable development. It promotes the empowerment of MSMEs, social enterprises, and sustainable livelihoods. It seeks a rapid and just transition and bears its costs, leaving no one behind, enabling vulnerable groups to become transition agents, and innovating in social protection and retraining.

The third is the Planetary Boundaries principle. A green economy protects, restores, and invests in nature. An inclusive green economy recognizes and nurtures nature's multiple values: the functional value of providing goods and services that

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<sup>47</sup> Joko Widodo's State of the Nation Address, August 16, 2022.

sustain the economy, the cultural value of nature that sustains society, and the ecological value of nature that sustains all life itself. It recognizes the limitations of natural capital that can be substituted for other capital, using the precautionary principle to avoid losing important natural capital and encroaching on ecological boundaries. Invests in protecting, growing, and restoring biodiversity, soil, water, air, and natural systems. Innovative in managing natural systems based on their properties such as circularity and aligned with local community livelihoods based on biodiversity and natural systems.

Fourth, the principles of efficiency and sufficiency. A green economy is geared towards supporting sustainable consumption and production. An inclusive green economy is one that is low-carbon, resource-efficient, diverse, and circular. An inclusive green economy includes new models of economic development that address the challenge of creating prosperity within planetary boundaries. The green economy recognizes that significant global change is necessary to limit natural resource consumption to physically sustainable levels if we are to remain within the planetary boundaries. It recognizes a 'social floor' of consumption of basic goods and services that are essential to meet human well-being and dignity, as well as a 'peak' of consumption that is unacceptable. It aligns prices, subsidies, and incentives with the true costs to society through mechanisms in which 'polluters pay' and/or where benefits accrue to those delivering inclusive green outcomes.

Fifth, the principle of Good Governance. A green economy is guided by integrated, accountable, and resilient institutions. An inclusive green economy is evidence-based; its norms and institutions are interdisciplinary, using robust science and economics and local knowledge for adaptive strategies. An inclusive green economy is supported by institutions that are integrated, collaborative, and coherent—horizontally across sectors and vertically across levels of government—and with sufficient capacity to fulfill their respective roles in an effective, efficient, and accountable manner. This requires public participation, informed consent, transparency, social dialogue, democratic accountability, and freedom from vested interests across all institutions—public, private, and civil society—so that enlightened leadership can be complemented by societal demand.

It encourages decentralized decision-making for local economies and the management of natural systems while maintaining strong, centralized standards, procedures, and compliance systems. The green economy builds financial systems with the goal of delivering prosperity and sustainability in a safe manner to serve the interests of society. The green economy is a universal and transformative change to the global status quo. It will require a fundamental shift in government priorities. Realizing this change will not be easy; however, it is necessary to achieve the Sustainable Development Goals.

From an Islamic perspective, the direction of development is divided into three objectives: (1) community-oriented, (2) masalahah-oriented, and (3) Falah-oriented. Figure 3 presents these objectives.

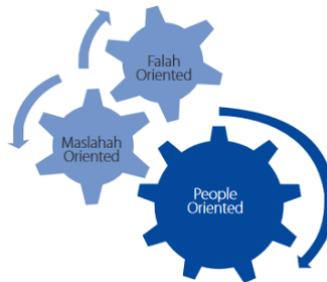


Figure 3. Orientation of Islamic Green Economic Development

The economic model of Islamic development was then formulated in the integrative multidimensional economic development model (IMEDM). This model accommodates factors that are considered in formulating development plans and strategies in Islam and follows the principles, objectives, orientations, and rules of Islamic development. In the IMEDM framework, the goal of development is to increase *maslahah*, which must fulfill the five components of *maqashid sharia*. Development is considered to occur when the level of *maslahah* increases over time. The level of *maslahah* is also affected by the level of sustainability.<sup>48</sup>

To understand the direction of budgeting policies in the Mataraman region from a green economy perspective, it is also necessary to examine the RPJMD document of the East Java Provincial Government for 2019–2024. The Provincial RPJMD document in East Java is important because it is a reference for district and city governments throughout East Java in preparing RPJMD documents in each district and city government, including in the Mataraman region. The alignment of ideas in realizing orphans as a "Miniature Green Economy" aims to regional development planning of districts and cities throughout East Java, which prioritizes green economic growth/green growth.

Green growth is essentially an approach to achieving several simultaneous goals that bring us closer to achieving true sustainable development, namely avoiding and reducing greenhouse gas emissions, building resilience to climate extremes and long-term change, using resources more efficiently, delivering sustainable and equitably distributed increases in GDP and living standards, and valuing natural capital that is often economically invisible despite supporting centuries of economic success. The definition of green growth is still evolving as countries experience what works and what does not work in implementing green growth.

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<sup>48</sup> A Jajang W Mahri et al, *Islamic Development Economics* (Jakarta: Bank Indonesia, 2021).

Planning for green growth must be integrated and comprehensive. It is important to understand the interdependencies between economic competitiveness and its implications for social development and environmental performance. Green growth is concerned not only with the rate of economic growth, but also with its quality, that is, the ability of growth to deliver economic, social, and environmental benefits that improve the quality of life of people in all segments of society. Thus, the quality of growth is as important as the rate of growth itself.

There are five ideal green growth outcomes that must be considered in regional development planning and design, and Mataraman is no exception. The five dimensions of green growth help stakeholders understand and measure the intersection of these outcomes. The five green growth outcomes are as follows:

Sustainable economic growth highlights the importance of sustainable economic outputs at the national, provincial, and district levels (gross domestic product). Such a sustainable economy generates widespread social development and prosperity. This growth can go beyond the industrial development model pioneered by developed countries, which exploits resources and is not environmentally friendly.

Productive service-providing ecosystems highlight growth that sustains natural capital, especially natural reserves that supply a continuous flow of essential ecosystem services. These include clean water supplies, fertile soils, and functioning forests. They make important contributions to economic growth and human well-being but are often overlooked in decision-making because they are not considered uses in economic production. Green growth seeks to address this market failure.

Inclusive and equitable growth highlights growth for the benefit of people, including those in urban and rural areas, the rich, and the marginalized. This outcome is a key objective of green growth and is highly correlated with economic growth and environmental quality. Countries with higher levels of poverty and inequality tend to benefit more from green growth interventions.

Social, economic, and environmental resilience highlights growth that builds economic, financial, social, and environmental resilience and relates to the system's ability to withstand external shocks (e.g., adapting to the physical impacts of climate change, economic sector diversification, food security, and currency and trade stability). Countries that are more exposed to the physical and resource impacts of climate change and those that derive most of their GDP from resource-intensive sectors are likely to benefit more from green growth interventions.

Greenhouse gas emission reductions highlight the importance of low-carbon growth in contributing to global and national efforts to mitigate climate change and minimize future negative impacts on local and international communities. Countries

with higher greenhouse gas emissions intensity have greater opportunities for cost-effective emissions reductions and urgently need assistance.

The five achievements of green economic growth above must then be measured using appropriate targets and indicators according to the realization of development in the Mataraman region, especially in Madiun City and Ponorogo Regency. Thus, it needs to be measured whether Madiun City and Ponorogo Regency have established priority regions in responding to the challenges of developing issues and problems as the focus of implementing sustainable regional development programs. This is done because regional clustering has an important influence on streamlining and optimizing the potential of economic, social, cultural, and environmental resources in Madiun and Ponorogo. The determination of this area is organized in the formulation of regional Strategic Areas with details: 1) strategic areas from the point of view of economic interests that affect the economic growth of the city/regency; 2) strategic areas from the point of view of social and cultural interests; and 3) strategic areas from the point of interest of the function and carrying capacity of the environment.

Grindle argues that policy implementation is determined by the content of the policy and its implementation context. Grindle's basic model states that after a policy is transformed, it must be translated into an action program or activity. Policy implementation does not always run smoothly, but depends on the context of implementation, which consists of power, interests, strategies, actors involved, characteristics of the authorities and institutions, as well as compliance and responsiveness.<sup>49</sup>

Referring to Grindle's approach, green development budgeting in Madiun City and Ponorogo Regency can be examined through at least three aspects to examine the implementation of the green economy in the Mataraman region. The three aspects include the legal aspect approach that will become the legal umbrella of green economy implementation, the planning document approach that will become the glue as well as the red thread of the direction of environmental development in the two regions, and the institutional approach, in which policy synchronization between institutions in the two regions is one of the success factors in policy implementation, including green economy development policies.

### **1.3.1 Legal Approach**

Compliance and responsiveness are important for implementing a policy. Compliance and responsiveness will occur if adequate regulatory tools are available. Therefore, in the implementation of the green economy in the Bangka Belitung Islands Provincial Government, adequate regulatory tools are needed.

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<sup>49</sup> Solichin Abdul Wahab, *Policy Analysis and Formulation of State Policy Implementation* (Jakarta: Bumi Aksara, 2002).

In the regulatory context, Law No. 32/2009 on Environmental Protection and Management (UU PPLH) does not provide the definition or characteristics of a green economy but only regulates the environmental economy. Article 1, point 33 of the EE Law confirms that environmental economic instruments are a set of economic policies to encourage the government, both central and regional governments, towards the preservation of environmental functions. The definition of preserving environmental functions is certainly insufficient as a criterion for a green economy. Given that the green economy is not limited to environmental issues but also includes sustainable welfare, health, education, and social justice. However, in the context of extensive legal interpretation, the understanding of preserving environmental functions can also be interpreted to include welfare and social justice issues.

Furthermore, Articles 42 and 43 of the PPLH Law, which concern environmental economic instruments, do not define or provide the characteristics of the green economy. However, if one examines the explanations of Articles 42 and 43 of the PPLH Law, it is hoped that at the level of the implementing regulations, the PPLH Law can accommodate the characteristics of the green economy in the principles of environmental economics and can eventually be outlined in the form of intermediate or implementing rules. The internalization of aspects of economic instruments into aspects of environmental protection and management can be accompanied by elements of the green economy, such that the regulation not only covers aspects of environmental conservation but also aspects of welfare and social justice, as the main characteristics of the green economy.

In the regional context, the Madiun City Government has a Regional Regulation of Madiun City No. 19 of 2011 concerning Environmental Protection and Management. Meanwhile, the Ponorogo Regency Government does not have a Regional Regulation on Environmental Management, and only has Ponorogo Regency Regional Regulation No. 7 of 200 concerning Domestic Wastewater Management and Regional Regulation No. 6 of 2021 concerning the Management of Household Waste and Household Waste. Thus, it is unsurprising that green economy aspects are not clearly elaborated in the RPJMD and RTRW local regulations. Ideally, local regulations are expected to be a legal umbrella for local governments in implementing environmentally sound and sustainable development, based on the 1945 Constitution. Similar to the PPLH Law, the local regulations in the two regions do not specifically regulate the green economy but generally regulate environmental management, especially household waste.

The application of the concept of a green economy in laws and regulations governing environmental protection and management is insufficient without presenting green economy arrangements in all aspects of the policy line. This is especially true for all sectors related to the field and/or the development sector. More

specifically, development activities that use natural resources as the basic material for their activities. The synergy of the three pillars (economic, social, and ecological) of sustainable development is important in this regard. Economic development activities based on natural resources and the environment should not only aim to support economic development and growth and have a significant impact on improving people's welfare, but also prioritize efforts to protect and preserve the environment.

### 1.3.2 Planning Document Approach

Green economic development in the region cannot exist in isolation. Green economic development refers to the impact of economic development that considers environmental aspects and sustainability in the region. Therefore, regional development planning documents that focus on environmental aspects and sustainable growth are important documents that will serve as key enablers for the implementation of the green economy. In the context of Grindle, such a planning document includes a policy implementation strategy.

In the context of development planning, the Regional Government has the Vision and Mission of the Regional Head, the Regional Medium-Term Development Plan (RPJMD), and the Regional Government Work Plan. These documents are strategic documents that contain the plans, targets, and goals of the Regional Government within a certain period of time, as well as the glue and red thread of development direction within Madiun City and Ponorogo Regency. Therefore, green economy-based development must be the foundation of every regional development planning document made by the Government of Madiun City and Ponorogo Regency, so that in the future, not only economic growth becomes the target and indicator of development success, but also the sustainability of environmental development and welfare.

To date, neither Madiun City nor Ponorogo Regency have a green economy development roadmap. Therefore, to implement green economy-based development planning, it is necessary to create a green economy development roadmap that will be used as a strategic document to refer to the preparation of development planning, ensuring it aligns with the objectives of green economy development. For instance, the two regions can refer to the Bojonegoro district since 2021, where the Bappeda has conducted a forum group discussion related to the "green economy" to encourage human development and regional economic development by considering aspects of environmental sustainability and the design of green economy implementation to support sustainable development in Bojonegoro Regency.<sup>50</sup>

Then in August 2023, it prepared a green economy road map themed "Green Economy towards Golden Indonesia 2045." Even in the Regional Development Plan

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<sup>50</sup> Bojonegoro, Focus Group Discussion "Green Economy", 2021

(RPD) submission meeting held on August 3, 2023, the Bojonegoro Government prepared the 2025-2045 Regional Long-Term Development Plan (RPJPD), along with the Bojonegoro Regional Development Plan (RPD), which was prepared for 2024-2026.

In the 2024-2026 RPD, the Bojonegoro Regency Government has developed seven major policy programs, including the green economy. In this program, every development must be environmentally sound and refer to sustainability and environmental sustainability. The document can then become a reference to be internalized in regional planning documents, even when the regional head has changed.

### **1.3.3 Institutional Approach**

Although the green economy has become the mainstream of economic thought, the development of the green economy in Indonesia, especially in the regions, is still at a normative level, or at least does not yet have a significant proportion in the regional economic system. The concept of the green economy has not fully become a reference in the regional development process. Currently, development is still based on business-as-usual (BUA) assumptions.

As mentioned above, Gridle also mentions that power and institutions are one of the implementation contexts that affect the implementation of policies. In Indonesia, the issue of the green economy is still a sectoral issue; for example, it is limited to certain ministries, such as the scope of the Ministry of Environment and Forestry (KLHK) or on regional initiatives. In the context of the Mataraman region, especially the governments of Madiun City and Ponorogo Regency, the issue of the green economy has not received significant attention. This can be observed both institutionally and in policy; there are no regional institutional policy documents specifically related to the green economy. Even in the local regulation as a legal umbrella and regional instrument, there is no specific regulation that contains roadmap rules and institutions that will carry out the management and development of a green economy. The management and development of the green economy could be in several institutions that carry out specific functions, such as regional development planning, public works and spatial planning, food, forestry, marine, and fisheries. However, it is necessary to appoint one institution that will carry out the function of harmonizing planning, management, and development of the green economy; for example, BAPPEDA DLH is mandated to do so so that the implementation of the green economy can be achieved properly.

The implementation of green economy budgeting in the context of regional development is in line with the principles of Islamic development based on the maqashid al-syariah. This can be explained as follows.

First, green economic budgeting includes maintaining religion (hifz al-din). Religion must be prioritized in determining the law. The religion that is the greenest or most concerned about the earth's environment (HR Abu Daud and Ibn Hibban) will make the whole earth a mosque.

Second, green economic budgeting includes maintaining the soul (hifz al-nafs), namely, maintaining the right to live honorably and preserving the soul.

Third, green budgeting includes maintaining the mind (hifz al-aql). A healthy environment often helps humans to think clearly and positively. Therefore, green industries play a role in creating an atmosphere that does not disturb people's minds.

Fourth, green economy budgeting includes the preservation of offspring (hifz al-nasl). The efficient use of resources in the green economy concept is in line with maqashid al-syariah.

Fifth, green economic budgeting includes the maintenance of property (hifz al-mal). A healthy economy always generates profits in the right way and prevents economic activities that can desecrate personal property and the property of others.

## CONCLUSION

Based on the discussion above, it can thus be concluded that *first*, a green economy-based development is necessary, given the increasingly uncontrollable environmental damage due to development. The development paradigm must change from brown development, which uses energy inefficiently (wasteful) and is not socially inclusive enough, towards an environmentally friendly and sustainable green economy. Although the green economy has become the mainstream of economic thought, the development of the green economy in Indonesia, especially in the regions, is still at a normative level, or at least does not yet have a significant proportion in the regional economic system. The concept of the green economy has not fully become a reference in the regional development process. Currently, development is still based on *business-as-usual* (BUA) assumptions.

*Second*, although the Madiun City Government has Madiun City Regional Regulation No. 19 of 2011 concerning Environmental Protection and Management and the Ponorogo Regency Government has Ponorogo Regency Regional Regulation No. 7 of 200 concerning Domestic Wastewater Management and Regional Regulation No. 6 of 2021 concerning Household Waste and Garbage Management, it does not have a regional regulation that specifically regulates the green economy. Therefore, this legal umbrella is not yet comprehensive and will not have a significant impact on its implementation. Therefore, it is necessary to prepare a *roadmap* or *master plan* for economic development based on the green economy in the two regions, which will serve as a reference document for regional development planning. There is also a need for a coordinating institution that will carry out the function of harmonizing the

planning, management, and development of the green economy in all sectors in the region so that the implementation of the green economy can be achieved optimally.

Regarding recommendations, the *master plan* should not change with the change of Regent or Mayor so that sustainable development based on the green economy can be implemented properly. Changes to the master plan or *roadmap* cause unfinished development to be abandoned because of the new plan. The master plan must be adapted to environmental conditions and maintained, even if it is related to the vision and mission of the regional head. With a well-organized master plan, it can achieve the development of various green economies. In addition, ideally, the initial concept always involves the government and the community because cooperation between the government and the community will create perfect *environmental governance*.

## **DISCLOSURE**

### **Conflicts of Interest**

The author declares that there is no conflict of interest in the publication of this paper.

### **Funding Statement**

This research did not receive any external funding.

### **Authorship level Contribution**

In this study, Yutisa Tri Cahyani and Lukman Santoso played key roles in conceptualization, data curation, and investigation, respectively. Yutisa Tri Cahyani and Lukman Santoso played key roles in conceptualization, data curation, and investigation, respectively. Sukron Ma'mun contributed to the formal analysis, methodology, and the critical process of reviewing and editing the manuscript. Our collaborative efforts were fundamental to the success of this study.

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